

WHAT IS CLAIMED IS:

1. A both-side recording apparatus including a recording unit for recording on a recording sheet, and a sheet inversion unit for receiving said  
5 recording sheet conveyed from said recording unit and returning said recording sheet to said recording unit after a front-back inversion, in which, after a recording in said recording unit on a side of said recording sheet, said recording sheet is inverted in  
10 said sheet inversion unit and is returned to said recording unit for recording on an opposite side of said recording sheet,

wherein said sheet inversion unit conveys said recording sheet along a predetermined conveying path  
15 thereby executing an inversion and returns said recording sheet to said recording unit and comprises, in said conveying path, a driving roller at a side contacting a recorded side of said recording sheet conveyed after the recording on a side in said  
20 recording unit, and an idler roller at a side contacting a non-recorded side of said recording sheet.

2. An apparatus according to claim 1, wherein,  
25 in said sheet inversion unit, said roller contacting said recorded side has a diameter larger than a diameter of said roller contacting said non-recorded

side.

3. An apparatus according to claim 1, wherein  
said sheet inversion unit conveys said recording  
5 sheet along a turn-around path with said recorded  
side at an inner side and said non-recorded side at  
an outer side, thereby inverting a front side and a  
back of said recording sheet and changing a conveying  
direction thereof, and conveys said recording sheet  
10 again to said recording unit.

4. An apparatus according to claim 1, wherein  
said recording unit executes recording by an ink jet  
process.

15

5. A both-side recording apparatus including a  
recording unit for recording on a recording sheet,  
and a sheet inversion unit for receiving said  
recording sheet conveyed from said recording unit and  
20 returning said recording sheet to said recording unit  
after a front-back inversion, in which, after a  
recording in said recording unit on a side of said  
recording sheet, said recording sheet is inverted in  
said sheet inversion unit and is returned to said  
25 recording unit for recording on an opposite side of  
said recording sheet,

wherein said sheet inversion unit conveys said

recording sheet along a predetermined conveying path  
thereby executing an inversion and returns said  
recording sheet to said recording unit and comprises,  
in said conveying path, a roller of an elastic member  
5 at a side contacting a recorded side of said  
recording sheet conveyed after the recording on a  
side in said recording unit, and a roller of a non-  
elastic member at a side contacting a non-recorded  
side of said recording sheet.

10

6. An apparatus according to claim 5, wherein  
said elastic member is formed by rubber or an  
elastomer.

15

7. An apparatus according to claim 5, wherein  
said non-elastic member is formed by a polymer resin.

20

8. An apparatus according to claim 5, wherein,  
in said sheet inversion unit, said roller contacting  
said recorded side has a diameter larger than a  
diameter of said roller contacting said non-recorded  
side.

25

9. An apparatus according to claim 5, wherein  
said sheet inversion unit conveys said recording  
sheet along a turn-around path with said recorded  
side at an inner side and said non-recorded side at

an outer side, thereby inverting a front side and a back of said recording sheet and changing a conveying direction thereof, and conveys said recording sheet again to said recording unit.

5

10. An apparatus according to claim 5, wherein said recording unit executes recording by an ink jet process.